

**WHAT IS CLAIMED IS:**

1. An emissions reduction trading system comprising:  
a registry that stores emission allowance and offset holding information for participants in a greenhouse gas emissions market; and  
a trading platform communicatively coupled to the registry, the trading platform being configured to enable trades of emission allowances and offsets by participants.
2. The system of claim 1, further comprising a guarantee mechanism that ensures next-day payment for exchange-cleared trades transacted using the trading platform despite failure of buyer to execute payment.
3. The system of claim 1, wherein the trading platform can perform auctions of exchange allowances and/or offsets.
4. The system of claim 3, wherein the auctions comprise single-clearing price auctions or discriminating price auctions.
5. The system of claim 1, wherein the greenhouse gas emissions market comprises multi-sector and multi-national components.
6. The system of claim 1, wherein participants register projects that are issued offsets amounting to at least a minimum level of mitigated tons of CO<sub>2</sub> per year.
7. The system of claim 6, wherein participants not having projects with offsets amounting to at least the minimum level of offset issuance per year are aggregated into groups having collective projects with

collective offsets totaling at least the minimum level of issued tons of CO<sub>2</sub> per year.

8. The system of claim 1, wherein the trading platform communicates with the registry to confirm identities of participants buying and selling trades while providing anonymous trading to the participants.

9. The system of claim 1, wherein the emission allowance and offset holding information stored by the registry includes baseline information.

10. The system of claim 9, wherein the registry further includes reduction schedule, economic growth provision limitations, and mitigation quantity information.

11. The system of claim 1, wherein the trading platform manages a standardized greenhouse gas emissions trading program among a number of business sectors.

12. The system of claim 1, wherein the trades of emission allowances and offsets by participants are done in real-time.

13. A method of conducting trades among participants in an emissions reduction and trading system over a communication network, the method comprising:

establishing baselines for participants in an emissions trading market and reduction levels from the baselines;

obtaining emissions information from the participants, the emissions information including emissions allowance and offset information;

determining on an individual participant basis required purchases and allowed sales; and

managing trades among participants to meet the determined required purchases and allowed sales.

14. The method of claim 13, wherein the baselines for participants are established from an average of emission levels in previous years.

15. The method of claim 13, wherein the reduction levels are a predetermined percentage decrease from each preceding year.

16. The method of claim 13, wherein individual participants are permitted sales of allowances up to the number of allowed sales determined.

17. The method of claim 13, wherein the required purchases for individual participants are capped at a predetermined percentage above the baseline for the individual participant.

18. The method of claim 13, wherein the managing trades among participants comprises transacting trades using a guarantee mechanism to ensure payment after trades are completed.

19. The method of claim 13, wherein the managing trades among participants comprises transacting trades using a reserve pool to ensure delivery of purchased Carbon Financial Instruments despite failure of seller to execute delivery.

20. A system for conducting trades among participants in an emissions reduction and trading system over a communication network, the system comprising:

means for establishing baselines for participants in an emissions trading market and reduction levels from the baselines;

means for obtaining emissions information from the participants, the emissions information including emissions allowance and offset information;

means for determining on an individual participant basis required purchases and allowed sales; and

means for managing trades among participants to meet the determined required purchases and allowed sales.

21. The system of claim 20, wherein individual participants are permitted sales of allowances up to the number of allowed sales determined.

22. The system of claim 20, wherein the required purchases for individual participants are capped at a predetermined percentage above the baseline for the individual participant.

23. The system of claim 20, wherein means for managing trades among participants comprises means for transacting trades to ensure payment after trades are completed.

24. The system of claim 20, wherein means for managing trades among participants comprises means for transacting trades to ensure payment despite failure of buyer to promptly make payment.

25. A method of employing standards in the creation, maintenance, and operation of a greenhouse gas emissions trading market, the method comprising:

establishing and operating a greenhouse gas emissions trading market using standards for:

trading Carbon Financial Instruments, the trading Carbon Financial Instruments including any one of allowances, offsets, and early action credits;

emissions reductions, the emissions reductions including baseline emission information and types of included facilities;

eligible offset projects;

constraints on trading, the constraints including single-firm sales limits;

an annual true-up procedure;

emissions and project quantification methods; and

maximum required purchases and maximum allowed sales.

26. The method of claim 25, wherein the emissions reductions further comprise an emissions mitigation schedule and emission monitoring protocols that vary by sector.

27. The method of claim 25, wherein the eligible offset projects comprise any one of landfill offsets, agricultural methane offsets, forestry offsets, soil offsets, and certified emissions reductions.

28. The method of claim 25, wherein the mitigation programs comprise electricity purchases from electricity production where emissions are mitigated.

29. The method of claim 25, further comprising establishing and operating the greenhouse gas emissions trading market using standards for auditing processes.

30. In an emissions reduction and trading system, a method including an electricity opt-in program, the method comprising:  
    establishing an electricity purchase baseline for a market participant;  
    receiving information on electricity purchases for the market participant;  
    determining qualification for allowance credit or debit based on the received information on electricity purchases for the market participant;  
    and  
    transacting the allowance surplus or shortfall as determined.

31. The method of claim 30, further comprising fixing a division of rights to reductions in emissions from electric power generators that result from reduced electricity demand on the part of a market member that exceeds an electricity purchase reduction objective, wherein the division is an equal sharing between the electricity producer and the electricity buyer.

32. An emissions reduction and trading system including an electricity opt-in program, the system comprising:  
    means for establishing an electricity purchase baseline for a market participant;

means for receiving information on electricity purchases for the market participant;

means for determining qualification for allowance credit or debit based on the received information on electricity purchases for the market participant; and

means for transacting the allowance credit or debit as determined.

33. An electronic auction configured to be conducted over a network of computers or conducted manually, the auction being for the purchase and selling of greenhouse gas allowances in an emissions reduction and trading system, the auction comprising:

an auction pool of greenhouse gas allowances received from an auction reserve or allowance offers;

bids for greenhouse gas allowances in the auction pool, the bids being received electronically via a network or manually; and

a processor to determine winning bids based on pre-determined parameters, the processor being configured to communicate auction results to member accounts in a registry for transfer of allowances, the processor being further configured to return proceeds pro rata to participants based on contributions of the participants to the auction reserve.

34. The auction of claim 33, wherein the auction is held annually or periodically during each year.

35. The auction of claim 33, wherein the processor determines price for the winning bids based on a single-clearing price process.

36. The auction of claim 33, wherein the processor determines price for the winning bids based on a discriminating price process.